

The Mueller Lecture

“Single Molecules and Single Gold Nanoparticles in the Spotlight”

Wednesday, April 21, 2021

12:30-1:30 p.m. Seminar via Zoom

1:30-2:30 p.m. Reception via Gather.Town

<https://gather.town/i/kNjxDT8j>

<https://purdue-edu.zoom.us/j/99648501847?pwd=b1hhcXlaNzJOQTZJUeUuRUlxeV Fudz09>

Meeting ID: 996 4850 1847 Passcode: Mueller



Michel Orrit

Professor Michel Orrit

MoNOS, Huygens-Kamerlingh Onnes Laboratory

Leiden University

2333 CA Leiden (The Netherlands)

About the Speaker Michel Orrit

Michel Orrit was born on February 27, 1956 in Toulouse, France, and studied at Ecole Normale Supérieure in Paris. He obtained a Ph.D. in physics in 1984 at Bordeaux University. During a post-doctoral stay in Göttingen (Germany) with H. Kuhn and D. Möbius, he studied Langmuir-Blodgett films doped with dyes. Back in Bordeaux, he and J. Bernard used the spectral hole-burning technique to investigate low-temperature dynamics and molecular orientation in these systems. They observed the first fluorescence signal from a single molecule in 1990. Their fluorescence excitation method was quickly adopted in several groups throughout the world, and was soon extended to room temperature in 1993. Since then, Orrit's group first in Bordeaux, then in Leiden since 2001, has stressed the power of single-molecule spectroscopy to remove ensemble averaging and to reveal dynamics at molecular scales without need for synchronization. He continues developing and applying single-molecule techniques to soft matter, nanoparticle plasmonics and nonlinear optics. Michel Orrit recently received the Edison-Volta Prize of the European Physical Society in 2016, and the Spinoza Prize of the Dutch Science Foundation NWO in 2017.

About C. R. Mueller

The C. R. Mueller lecture honors Professor C. R. Mueller, who was a faculty member in Purdue's Chemistry department from 1951 until his death in 1985. He received his Ph.D. in theoretical chemistry under the direction of Prof. H. Eyring at the University of Utah before coming to Purdue. While at Purdue, his research interests included theoretical studies of interatomic and intermolecular forces using crossed molecular beams. He also made many contributions to the use of computers in physical chemistry education.



Brought to you by Purdue Physical Chemistry Division
<https://www.chem.purdue.edu/pchem/>

Past C. R. Mueller Lecturers

Richard N. Zare – Stanford University
Dudley Herschbach – Harvard University
John Polanyi – University of Toronto
Ahmed Zewail – California Institute of Technology
Ben Widom – Cornell University
Carl Lineberger – University of Colorado/JILA
Raphael D. Levine – Hebrew University
Roger E. Miller – University of North Carolina, Chapel Hill
Stephen R. Leone – University of California at Berkeley
Sunney Xie – Harvard University
Mark A. Ratner – Northwestern University
Graham R. Fleming – University of California, Berkeley
Emily A. Carter – Princeton University

Brought to you by Purdue Physical Chemistry Division
<https://www.chem.purdue.edu/pchem/>